

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A substrate processing apparatus performing a predetermined process to a substrate, comprising:

- a process tank to store a predetermined processing liquid;
- a holding element to hold a substrate in said process tank;
- a processing liquid supply element to supply a heated processing liquid to said process tank;
- a process chamber to perform drying of a substrate, said process chamber including an interior and being disposed above said process tank;
- an inert gas supply element to supply an inert gas from an upper surface of said process chamber into said process chamber; and
- a displacement element to displace a substrate held by said holding element from a first position at which a substrate is immersed in a processing liquid to a second position at which the substrate is not immersed in the processing liquid, under condition that said inert gas supply element supplies an inert gas into said process chamber after the temperature of the substrate is elevated by a processing liquid heated in said process tank; and-
- an exhaust element to exhaust the atmosphere of said process chamber via an exhaust port located in the vicinity of the liquid surface of said predetermined processing liquid stored in said process tank, under the condition that a substrate held by said holding element is displaced from said first position to said second position by said displacement element.

2. (Currently Amended) The substrate processing apparatus according to claim 1 further comprising:

- a halogen lamp process chamber temperature control element to control the atmosphere of said process chamber so as to be in a heated state by irradiating light toward the interior of said process chamber, said halogen lamp being disposed outside the interior of said process chamber, wherein said process chamber includes a member that allows said light irradiated from said halogen lamp to pass into the interior.

3. **(Currently Amended)** The substrate processing apparatus according to claim 1 further comprising: 2 wherein

an infrared heater to control the atmosphere of said process chamber so as to be in a heated state by irradiating infrared rays toward the interior of said process chamber, said infrared heater being disposed with the interior of said process chamber, wherein

said process chamber includes a member that allows said infrared rays irradiated from said infrared heater to pass into the interior.

~~said process chamber includes a translucent member, and~~

~~said process chamber temperature control element is a heating element of light radiation type and disposed in the exterior of said process chamber.~~

4. **(Canceled)**

5. **(Original)** The substrate processing apparatus according to claim 1 wherein said processing liquid supply element supplies a chemical solution to said process tank.

6. **(Original)** The substrate processing apparatus according to claim 1 wherein said processing liquid supply element supplies said process tank with a pure water heated to not less than 70 , as said predetermined processing liquid.

7. **(Currently Amended)** The substrate processing apparatus according to claim 1 wherein said processing liquid supply element includes a de-gassing element ~~bubble suppressing element~~ to remove ~~suppress~~ bubbles contained in a processing liquid before it is supplied to said process tank.

8. **(Original)** The substrate processing apparatus according to claim 1 wherein said inert gas supply element includes a filter element to clean said inert gas supplied into said process chamber, said inert gas supply element supplying said inert gas from an upper surface of said process chamber through said filter element.

9. - 10. (Canceled)

11. (Currently Amended) A substrate processing apparatus performing a predetermined process to a substrate, comprising:

- a process tank to store a predetermined processing liquid;
- a holding element to hold a substrate in said process tank;
- a processing liquid supply element to supply a heated processing liquid to said process tank;
- a process chamber to perform drying of a substrate, said process chamber being disposed above said process tank;
- an inert gas supply element to supply an inert gas into said process chamber by discharging said inert gas from a purge element;
- a displacement element to displace a substrate held by said holding element from a first position at which a substrate is immersed in a processing liquid to a second position at which the substrate is not immersed in the processing liquid, under condition that said inert gas supply element supplies an inert gas into said process chamber after the temperature of the substrate is elevated by a processing liquid heated in said process tank; and
- an exhaust element to exhaust the atmosphere of said process chamber via an exhaust port located in the vicinity of the liquid surface of said predetermined processing liquid stored in said process tank, under the condition that a substrate held by said holding element is displaced from said first position to said second position by said displacement element, wherein
- said purge element discharges said inert gas in a direction substantially parallel to the liquid surface of said predetermined processing liquid stored in said process tank, said purge element being located in the vicinity of above said exhaust port.

The substrate processing apparatus according to claim 9 wherein

- said purge element discharges said inert gas in a direction substantially parallel to the liquid surface of said predetermined processing liquid:

12. (Original) The substrate processing apparatus according to claim 1 wherein

said inert gas supply element includes an adjusting element to adjust the humidity of an inert gas supplied into said process chamber.

13. (Original) The substrate processing apparatus according to claim 1 wherein said inert gas supply element includes an inert gas temperature control element to control an inert gas supplied into said process chamber so as to be in a heated state.

14. (Original) The substrate processing apparatus according to claim 1 wherein said holding element holds a substrate such that the face of processing of the substrate is substantially parallel to a vertical direction in said process chamber.

15. - 24. (Canceled)